

210151US00  
10/717297  
Art Unit: 1714

11

## REMARKS

### 1. *Objection and Amendment to the Specification*

The specification has been objected to due to the indication that behenates could be "alternatively called docosenates" on page 3, line 3. As the Examiner points out, one skilled in the art would readily recognize that the proper alternative name for a behenate is a docosanate. Applicants have amended the specification to indicate that behenates can be "alternatively called docosanates." Applicants believe that no new matter has been introduced by the amendment to the specification. Applicants thank the Examiner for pointing out the error.

### 2. *Status of Claims*

After entry of the claim amendments, claims 1-3, 7-23, and 26-44 are pending and under consideration.

### 3. *Claim Amendments*

Claims 4-6 and 24-25 have been canceled. Claims 31 and 42 have been amended to correct inadvertent typographical errors. Claims 1, 21, and 43 have been amended to stipulate, "the transition metal carboxylate comprises a behenate or an arachidate." Claim 7 has been amended to stipulate, "the transition metal carboxylate comprises cobalt behenate." Claim 9 has been amended to stipulate, "the transition metal carboxylate comprises cobalt arachidate." The amendments to claims 1, 7, 9, 21, and 43 find support generally throughout the specification and specifically at page 3, lines 5-7; page 7, lines 1-3; page 12, lines 17-20; page 13, lines 26-29. Applicants believe that no new matter has been introduced by the amendments made herein.

### 4. *Double Patenting Rejection*

Claims 1-43 have been provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-41 of copending Application USSN 10/940,007. Applicants respectfully traverse this ground for rejection but have

210151US00  
10/717297  
Art Unit: 1714

12

filed a terminal disclaimer, directed to copending Application USSN 10/940,007, to overcome this rejection and advance the prosecution of this application.

*5. Claim Rejections under 35 U.S.C. §102 and 35 U.S.C. §103*

*a. Claim Rejections over Ching et al.*

Claims 1-3, 6, 11 13-25 and 28-39 have been rejected under 35 U.S.C. §102(b), or in the alternative, under 35 U.S.C. §103(a) as being unpatentable over Ching et al., US 6,437,086-B1 ("Ching"). Specifically, page 5 of the Office Action dated June 1, 2005, states that Ching's polymeric transition metal salts either anticipate or make obvious the claims of the invention. Applicants respectfully traverse these rejections.

Applicants respectfully submit that Ching teaches polymeric metal salts comprising at least two metal counterions (see column 2, line 48-50). In contrast, the current independent claims 1 and 21 stipulate "the transition metal carboxylate comprises a behenate or an arachidate." Applicants respectfully submit that neither a transition metal behenate nor a transition metal arachidate can comprise at least two metal counterions as behenic acid and arachidic acid from which the transition metal carboxylates are derived are monocarboxylic acids and thus cannot form a polymeric metal salt comprising at least two metal counterions. Additionally, Applicants respectfully submit that Ching does not teach or suggest transition metal salts of monocarboxylic acids as it is entirely focused upon polymeric transition metal salts. Therefore, Ching does not anticipate nor obviate the current claims. Applicants respectfully request that the claim rejections under 35 U.S.C. §102(b), or in the alternative, under 35 U.S.C. §103(a) in view of Ching be withdrawn.

*b. Claim Rejection over Ching et al. in view of Ching et al.*

Claim 12 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Ching in view of Ching et al., "Tasteless Oxygen Scavenging Polymer," ("Tasteless"). Specifically, page 6 of the Office Action dated June 1, 2005, asserts that while Ching does not disclose the oxidizable organic compounds set forth in claim 12, Tasteless discloses "sacrificial oxidizable organic compounds

210151US00  
10/717297  
Art Unit: 1714

13

known in the art to include ascorbic acid, squalene, and unsaturated fatty acids” and that “it would have been obvious to one of ordinary skill in the art at the time of the invention to employ these well known . . . oxidizable compound in combination with the newer polymeric transition metal salts” disclosed in Ching. Applicants respectfully traverse this rejection.

Applicants respectfully submit that Ching does not anticipate nor obviate claims directed to an “oxygen scavenging composition comprising . . . at least one transition metal carboxylate, wherein the transition metal carboxylate comprises a behenate or an arachidate” for the previously noted grounds. Additionally, and as noted by the Examiner, Tasteless only addresses the sacrificial oxidizable organic compound limitation of claim 12 and thus does nothing to remedy the deficiency in regards to teaching or suggesting a “transition metal carboxylate [that] comprises a behenate or an arachidate.” Therefore, Ching in view of Tasteless does not obviate claim 12. Applicants respectfully request that the claim rejection of claim 12 under 35 U.S.C. §103(a) over Ching in view of Tasteless be withdrawn.

c. Claim Rejection over Ching et al. in view of Katsumoto et al.

Claim 43 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Ching in view of Katsumoto et al., US 5,776,361, (“Katsumoto”). Specifically, the discussion bridging pages six and seven of the Office Action dated June 1, 2005, asserts that while Ching “fails to disclose separate adjacent layers for the at least one metal catalyzed oxidizable organic compound, and the at least one transition metal carboxylate comprising between 20 and 30 carbon atoms,” it would have been obvious to apply the “arrangement for a polyterpene oxidizable compound and a transition metal carboxylate such as cobalt oleate and others” disclosed in Katsumoto to “the polymeric transition metal salts” disclosed in Ching. Applicants respectfully traverse this rejection.

Applicants respectfully submit that Ching does not anticipate nor obviate claims directed to an “oxygen scavenging composition comprising . . . at least one transition metal carboxylate, wherein the transition metal carboxylate comprises a behenate or an arachidate” for the previously noted grounds. Additionally, as noted by the Examiner, Katsumoto only addresses the arrangement of the

210151US00  
10/717297  
Art Unit: 1714

14

separate layers element of claim 43 and thus does nothing to remedy the deficiency in regards to teaching or suggesting a "transition metal carboxylate [that] comprises a behenate or an arachidate." Therefore, Ching in view of Katsumoto does not obviate claim 43. Applicants respectfully request that the 35 U.S.C. §103(a) rejection of claim 43 over Ching in view of Katsumoto be withdrawn.

**d. Claim Rejections over Yang et al., US 6,818,151-B1**

Claims 1-6, 9-11, 13-25, and 27-43 have been rejected under 35 U.S.C. §102(e) as anticipated by or, in the alternative under 35 U.S.C. §103(a) as obvious, over Yang et al., US 6,818,151 ("Yang"). Specifically, page 8 of the Office Action dated June 1, 2005, asserts that Yang "discloses C20 alkanoate transition metal salts, which encompassed cobalt arachidate." Applicants respectfully traverse this rejection.

Applicants respectfully submit that Yang actually discloses a counterion selected from a range of C<sub>1</sub>-C<sub>20</sub> alkanoate but does not offer further specificity regarding the types of alkanoate that may be utilized. Additionally, Yang provides examples of linear and branched alkanoates that fall within the C<sub>1</sub>-C<sub>20</sub> alkanoate range indicating, in general, that the alkanoates can be linear or branched. Yang also suggests several potential alkanoates including "acetate, oleate, stearate, palmitate, 2-ethylhexanoate, neodecanoate" (Yang column 11, lines 4-6) but does not specifically mention arachidate. Therefore, Yang does not provide sufficient specificity to constitute anticipation of currently pending claims. Applicants respectfully request that the claim rejections under 35 U.S.C. §102(e) over Yang be withdrawn.

Claims 1-6, 9-11, 13-25, and 27-43 have also been rejected under 35 U.S.C. §103(a) as being obvious over Yang. See page 8 of the Office Action dated June 1, 2005. Applicants respectfully traverse this ground for rejection. However, in the interest of furthering prosecution of the application, Applicants provide the included statement of common ownership which thereby disqualifies Yang under 35 U.S.C. §103(c) as a prior art reference in a rejection under 35 U.S.C. §103(a). Applicants respectfully request that the claim rejection under 35 U.S.C. §103(a) over Yang be withdrawn.

210151US00  
10/717297  
Art Unit: 1714

15

e. Claim Rejections over Himeshima et al., Inoue et al., Tomita et al., or Bansleben et al.

Claims 1-5, 11-13, 15, 21-24, and 28-30 have been rejected under at 35 U.S.C. §102(b) or 35 U.S.C. §103(a) as being unpatentable over the following references: Himeshima et al. - US 2002/013512-A1 ("Himeshima"), Inoue et al. - US 4,908,151 ("Inoue"), Tomita et al. - US 6,248,258-B1 ("Tomita"), or Bansleben et al. - WO 97/32925. Specifically, pages 8-10 of the Office Action dated June 1, 2005, assert that these references disclose oxygen scavenging compositions anticipating or obviating the present invention. Applicants respectfully traverse these rejections.

Applicants respectfully submit that Himeshima, Inoue, Tomita, and Bansleben teach oxygen scavenging mixtures comprising transition metal salts based upon unsaturated carboxylates. In contrast, the presently pending claims are directed to saturated transition metal carboxylates.

Specifically, Himeshima, Inoue, Tomita, and Bansleben teach oxygen scavenging compositions comprising unsaturated transition metal carboxylates: a cobalt tall oil (tall oil containing abietic acid -  $C_{20}H_{30}O_2$ ), a transition metal salt of the unsaturated fatty acid (such as arachidonic acid -  $C_{20}H_{32}O_2$ ), a cobalt or manganese tall oil fatty acid, or transition metal tallate, respectively. Independent claims 1 and 21 stipulate "the transition metal carboxylate comprises a behenate or an arachidate." Behenate and arachidate are both recognized by those skilled in the art as saturated carboxylates. Therefore, Himeshima, Inoue, Tomita, and Bansleben do not anticipate nor obviate currently pending claims. Applicants respectfully request that the claim rejections under 35 U.S.C. §102 and 35 U.S.C. §103 over Himeshima, Inoue, Tomita, and Bansleben be withdrawn.

**210151US00****10/717297****Art Unit: 1714****Statement of Common Ownership**

Application Serial Number 10/717,297 (the present application) and US patent 6,818,151 were, at the time of the invention of Application Serial Number 10/717,297 was made, owned by Chevron Phillips Chemical Company LP.

210151US00  
10/717297  
Art Unit: 1714

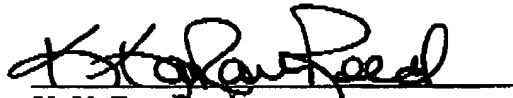
17

6. *Final Remarks*

In view of the remarks and amendments set forth above, the Applicants respectfully submit that pending claims 1-3, 7-23, and 26-44 are in condition for allowance. The Examiner is invited to contact the undersigned patent attorney at (832) 813-4339 with any questions, comments or suggestions relating to the referenced patent application.

Respectfully submitted,

Date: October <sup>2nd</sup> 2005  
CHEVRON PHILLIPS CHEMICAL CO. LP  
10001 Six Pines Drive  
The Woodlands, Texas 77380  
Phone: (832) 813-4339  
Fax: (832) 813-6060

  
K. KaRan Reed  
Registration No. 45,036  
ATTORNEY FOR APPLICANTS